



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,269	07/15/2003	Sandeep Bhatt	02077(3600-395-01)	8766
7590 Martha Ann Finnegan, Esq. Cabot Corporation 157 Concord Road Billerica, MA 01821-7001				
EXAMINER HENDRICKSON, STUART L				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
10/15/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/620,269

Applicant(s)

BHATT, SANDEEP

Examiner

Stuart Hendrickson

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 24 and 26-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24, 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The following summaries of individual references are made here for convenience sake, and apply to the rejections to follow:

The Industrial Carbon reference is presented as evidence that as-synthesized carbon blacks meet the 325 mesh limitation, except for the 'poor' grades- bearing in mind the age of the reference, which reflects the state of the art in the 1940s. Note also the sulfur values reported as typical. The Medalia article has extended discussion and pictures indicating that carbon black has a small particle size and meets the 325 mesh limitation.

Claims 1-21, 24, 26-30, 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Sant 5877250, in view of Industrial Carbon and the Medalia article.

The reference teaches what appears to be the claimed carbon black; the size is 20 nm or less, the iodine area is 65-112. As to the 325 residue, see the evidentiary references. Moreover, specification pg. 13 indicates that the present carbon black is the same as that of Sant, with no modifications made, so the other properties appear possessed.

Claims 1-21, 24, 26-30, 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Sant 5877251, in view of Industrial Carbon and the Medalia article.

The reference teaches a carbon black having size 25 nm or less, the iodine area is 50-112. As to the 325 residue, see the evidentiary references. Moreover specification pg. 13 indicates that the present carbon black is the same as that of Sant, with no modifications made, so the other properties appear possessed.

Claims 1-10, 26, 29-33 and 41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6482386, in view of Industrial Carbon and the Medalia article. Although the conflicting claims are not identical, they are not patentably distinct from each other because the numerical values overlap.

Column 4 teaches a tube shape and fluffy form, which indicates the 325 mesh limitation is met. Of great interest is the teaching in col. 3 that the carbon blacks can be made by the process of 5877250- compare to present specification pg. 13. If both are made by the same process, then they are prima-facie patentably indistinct.

Claims 1-9, 11-17, 19-21, 24-26, 28-29, 34-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamazaki et al. 6025429 in view of Weaver et al. 5352289, Dickerson 4755371, Industrial Carbon and the Medalia article.

Yamazaki teaches in the entire document, especially ex. 6 and col. 11, examples of acetylene blacks having low grit contents, and iodine values of 92 and 110. Table 1 explicitly teaches ash values in the claimed range.

Weaver teaches in col. 3 that acetylene blacks are known to be low in S, which is expected because they are made from a source which contains little or no S. Note also the DBP values recited. Thus, it appears that the carbon of Yamazaki is patentably indistinct from that which is claimed.

Dickerson teaches in column 6 the claimed 325 mesh residue for carbon black. The Industrial Carbon reference is presented as evidence that as-synthesized carbon blacks meet the 325 mesh limitation, as is Medalia (supra). Therefore, it appears based upon this additional evidence that the carbon black of Yamazaki renders the claims unpatentable. The particle size is unknown, but no difference has been shown. Col. 1 of Yamazaki teaches polymers and col. 3 teaches the loading.

Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. 6025429 in view of Weaver et al. 5352289, Dickerson 4755371, Industrial Carbon and the Medalia article above as applied to claims 1, 4, 29, and further taken with WO 01/79345.

The above references do not teach the claimed pipe, however '345 teaches forming one to transport water or natural gas (both under pressure). If used for water, then water is present. If used for natural gas, then an underground (ie, potentially moist environment) pipe is inferred. Weaver col. 3 teaches that low S carbon black is desirable where water could be a problem, thus using the carbon black of Yamazaki in a pipe is an obvious expedient to avoid 'tree' formation.

Claims 1-3, 11-21, 24, 34-36, 37-40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Giet 4013759 in view of Dickerson, Weaver, Medalia article, Industrial Carbon and the Dee Snell article.

Giet teaches, in the entire patent but especially in column 6, high purity carbon black which can possess the claimed area. From the data in col. 6 middle, the ash and S contents are mathematically met by subtraction from 100%. The particle sizes are 15-20 nm. It is noted that Giet does not actually specify which (iodine or nitrogen) area is reported, so a difference may not exist. Iodine and nitrogen are shown to correlate by the Dee Snell/Schubert article pg. 186 submitted thus, even if Giet refers to the nitrogen and not iodine area, the claimed iodine area appears to be met.

The 74 micron residue reported is 200 mesh; so the 200 mesh residue is known to be zero. Dickerson, Weaver, Medalia and Industrial Carbon are relied upon as above. Concerning claims 34-36, no difference is seen due to the similarity of the other properties.

Claims 1-21, 24, 26-30, 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giet in view of Dickerson, Weaver, Medalia article and Industrial Carbon, and taken with Von Konyenburg.

Giet not does show a polymer material, but teaches the advantages thereof in col. 1. Using the claimed polymers is an obvious expedient to provide an 'electro-conductive rubber' composition. The amount of carbon is deemed an obvious expedient of optimization of

properties; the wide range of ratios include what appear to be conventional ratios- see Von Konynenburg col. 8 and 15. Note also In re Boesch 205 USPQ 215. Claim 30 appears to encompass normal shapes of extruded polymer.

Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giet in view of Dickerson, Weaver, Medalia article and Industrial Carbon, and taken with Von Konynenburg as applied to claims 1, 4, 29 above, and further in view of WO '345.

The above references do not teach the claimed pipe, however '345 teaches forming one to transport water or natural gas (both under pressure). If used for water, then water is present. If used for natural gas, then an underground (ie, potentially moist environment) pipe is inferred. Weaver col. 3 teaches that low S carbon black is desirable where water could be a problem, thus using the carbon black of Giet in a pipe is an obvious expedient to avoid 'tree' formation.

Applicant's arguments filed 12/5/08 have been fully considered but they are not persuasive. The arguments concerning the prior-art rejections appear to be re-hashes of earlier arguments; previous examiner arguments are incorporated herein. Repeated also is the argument that multiple reference 102 rejections are improper. Suffice it to say that the MPEP clearly provides for them, and that if 1000 properties would be claimed, then 1000 evidentiary references would be acceptable. The illogic of this position is best illustrated in the argument on pg. 18 about which standard is used: applicant complains that the exact standard is not used. Applicant cannot have it both ways; they cannot complain that a property is not taught, and then later complain that an evidentiary reference is used to show that it is taught. The '055 patent does not address Giet, and the relevance is not understood since it provides scant details about a known procedure. I2 and N2 correlate, but that does not mean they are identical so the tests are not redundant. The examiner agrees that no subsequent reference has come along to say

'the Giet material has the following properties...'. however the Office has provided reasonable evidence sufficient o shift the burden of proof to the applicant to show a difference, which is all that is required (and possible). Applicant has the laboratory, not the PTO. Applicant has not identified any argument newly presented, and no others are found. Thus, all arguments have been addressed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

/Stuart Hendrickson/
Primary Examiner, Art Unit 1793